

# Chinaroot Greenbrier Rhizome (*Rhizoma Smilacis Chinae*) – 菝葜

## Sample source

Commercially available Chinaroot Greenbrier Rhizome

## Chemical reference substances

Diosgenin (National Institute for the Control of Pharmaceutical and Biological Products, Batch number 1539-200201)

## Preparation of test solution

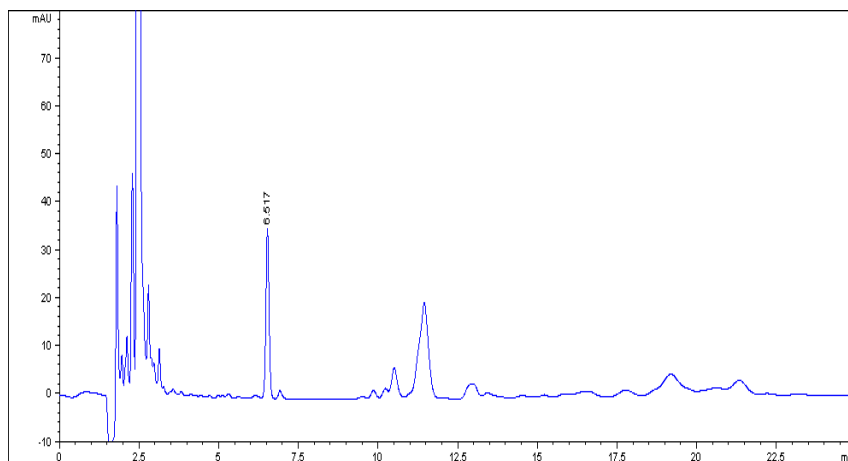
Accurately weigh 8 g of the powder into a Soxhlet extractor (No. 2 sieve), add a quantity of ethanol, and soak overnight, heat under reflux until the extract is colorless. Recover the solvent to about 100 mL, add 16 mL of hydrochloric acid, heat under reflux on a water bath for 2 hours, allow to cool, and extract with four 40 mL quantities of petroleum ether (60-90 °C) by shaking. Combine the extracts, evaporate the solvent to dryness. Dissolve the residue in acetonitrile and transfer to a 10 mL volumetric flask, dilute with acetonitrile to volume, mix well, filter and use the filtrate as the test solution.

## Chromatographic conditions

- Column: ZORBAX XDB C18, 4.6×250 mm, 5 µm (990967-902)
- Column temperature: 35 °C
- Mobile phase: acetonitrile-water (72:28)
- Detector wavelength: 203 nm
- Flow rate: 1.0 mL/min
- Injection volume: 5 µL

## Chromatographic system

- Agilent 1200 Series quaternary pump with vacuum degasser
- Agilent 1200 Series high-performance autosampler
- Agilent 1200 Series thermostated column compartment
- Agilent 1200 Series diode-array detector
- System control through Agilent ChemStation revision B.01.01



Components	k'	Ret Time (min)	Height (mAU)	Area (mAU*s)	n	USP T <sub>r</sub>
Diosgenin	1.607	6.517	35.20	243.4	21754	1.05